

The U.S. Bureau of Reclamation received a completed Biological Opinion (BO) from the National Oceanic and Atmospheric Administration (NOAA Fisheries) in July of 2003. This document described the Trinity River Bridges Project and its effects on Southern Oregon/Northern California Coasts (SONCC) coho salmon and their designated critical habitat. The BO includes Reasonable and Prudent Measures (RPMs) which Reclamation and its contractors are required to abide by in order to ensure protection of federally listed Trinity River threatened and endangered fish and their habitats. These RPMs and their Terms and Conditions, which ensure RPM implementation, are included below. The contractor will need to comply with this list of conditions as appropriate during construction. Reclamation holds the permit and will be responsible for reporting and monitoring of results.

A complete copy of the BO will be available at the time of Notice to Proceed.

FROM THE Trinity River Bridges Project BIOLOGICAL OPINION:

B. Reasonable and Prudent Measures

NOAA Fisheries thinks the following reasonable and prudent measures are necessary and appropriate to minimize incidental take of SONCC coho salmon.

1. To minimize the amount and extent of incidental take from project activities within and adjacent to the Trinity River, measures shall be taken to protect all salmonids present.
2. To minimize the amount and extent of incidental take from construction activities near the river, effective erosion and pollution control measures shall be developed and implemented to minimize the possibility of contaminant spills and the movement of soils and sediment both into and within the river.
3. To minimize the amount and extent of take from loss of instream salmonid habitat, measures shall be taken to avoid impacting habitat features.
4. To ensure effectiveness of implementation of the reasonable and prudent measures, monitoring and evaluation shall be conducted and reported both during and following construction.

C. Terms and Conditions

Reclamation must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are non-discretionary.

1. To implement Reasonable and Prudent Measure #1 above, Reclamation shall ensure that:
 - a. Project activities in the waters of the Trinity River, below the Ordinary High Water Mark (OHW) as defined by the Army Corps of Engineers, or in the waters of the Trinity River if waters are above the OHW, shall not occur before April 15 or after September 15 during the first year of construction at the Salt Flat Bridge and Biggers Road Bridge sites, and shall not occur before June 15 in subsequent years. Project activities in the waters of the Trinity River shall not occur before May 15 or after September 15 during the first year of construction at the Poker Bar Bridge site, and shall not occur before June 15 in subsequent years. Project activities in the waters of the Trinity River shall not occur before June 15 or after September 15 of a given calendar year at the Bucktail Bridge site. NOAA Fisheries may allow in-water work to continue beyond September 15 under the terms of this Opinion if conditions are such that expected adverse effects to coho salmon appear to be less than or equal to those analyzed in the Opinion. If additional in-water work will be required after September 15, Reclamation shall request an extension by contacting Mr. Mike Kelly of the NOAA Fisheries Arcata Field Office

at 707-825-5178 as early as possible to discuss remaining work items and to review conditions.

b. Material used to construct instream vehicle crossings, instream access roads, or instream work platforms shall be clean, washed “spawning sized” gravel from Trinity River watershed sources. (If contractors propose use of clean material other than gravel, Reclamation shall describe this material and how it will be used to NOAA Fisheries for approval.) The areal extent of any instream fill shall be minimized to the extent practicable. Salmonids shall not be crushed during placement of instream fill material.

c. Use of instream crossings shall be limited to vehicles and equipment that cannot use existing bridges to cross the river, and the number of instream crossings made by vehicles shall be minimized to the extent practicable.

d. Biologists will survey for salmonid presence in areas adjacent to crossings, construction platforms and other in-channel fill, and if salmonids are present in areas prone to particular hazards (falling material, driving vehicles) salmonids will be excluded from these areas by use of block nets or other low-impact methods, not including trapping and relocating. Upstream and downstream passage shall not be restricted by block nets or other methods.

e. If lethal take of coho salmon occurs, Reclamation will immediately notify Mr. Mike Kelly of the NOAA Fisheries Arcata Field Office at 707-825-5178, or call the general office line at 707-825-5163 if Mr. Kelly is not available. The purpose of this call shall be to review the circumstances surrounding the lethal take and modify project activities as necessary to prevent further lethal take. The following information shall be supplied initially: The location of the carcass or injured specimen, and apparent or known cause of injury or death, and any information available regarding when the injury or death likely occurred.

2. To implement Reasonable and Prudent Measure #2 above, Reclamation shall ensure that:

a. Vehicle maintenance, re-fueling of vehicles and storage of fuel shall be done at least 150 feet (horizontal distance) from the OHW, or within an adequate fueling containment area. Reclamation shall monitor adequacy of spill containment methods.

b. At the end of each work shift, vehicles shall be stored greater than 150 feet (horizontal distance) from the OHW. Vehicles and machinery that must cross the main river channel to exit work sites may remain on the work site at the end of a work shift provided that adequate containment of possible spills is provided. Reclamation shall monitor adequacy of spill containment methods.

c. Excavated spoils that will not be used in embankments or bank and channel construction shall not be stored or stockpiled on site and shall be hauled to an approved disposal site.

- d. Any settling basins shall be sized appropriately to allow percolation of the effluent through the bottom and sides rather than overflow. The settling basin shall be cleaned out each time it reaches 2/3 of capacity and be clean prior to recontouring the site.
- e. Materials placed to contain materials escaping from the construction activities shall not contact water flowing in the stream channel.
- f. When concrete is poured, work shall be contained so the pH of the river is not affected through contact with “green” concrete. Any effluent containing concrete slurry shall be pumped into a tank and disposed of at an offsite location without the possibility of flowing into the stream channel.
- g. The Contractor shall develop and implement site-specific best management practices, a Water Pollution Control Plan, and emergency spill controls, and is responsible for containment and removal of any toxins released. Reclamation shall monitor the contractor to ensure compliance.
- h. Appropriate monitoring measures shall be implemented by Reclamation to document compliance with management practices, e.g. turbidity monitored below the work site following the California State Regional Water Quality Control Board criteria.
- i. Any water pumping activities from locations that may contain coho salmon must conform to NOAA Fisheries’ water drafting guidelines. These guidelines are available at: <http://swr.nmfs.noaa.gov/hcd/WaterDrafting-02.htm>
- j. Drilling lubricants shall be water or bentonite without additives when drilling takes place within the river channel, including on dry gravel beds and bars. Initial drilling through gravels shall be accomplished using clean water as a lubricant. Once bedrock or consolidated material is reached, drilling mud (bentonite clay without additives) may be used.

3. To Implement Reasonable and Prudent Measure #3, above, Reclamation shall ensure that:

- a. Disturbance of Large Woody Debris (LWD) shall be avoided when possible. Stockpiling of necessarily removed LWD material from the construction area shall occur and LWD shall be stockpiled on the edges or upstream of the site which may allow for the natural redistribution of LWD during high flows.
- b. Pools shall be maintained to provide resting and rearing habitat for coho salmon migrants.
- c. All rock or gravel that will contact water shall be placed such that salmonids will not be crushed during its construction or removal.

4. To Implement Reasonable and Prudent Measure #4 above Reclamation shall ensure that:

a. A post-construction report shall be sent to NOAA Fisheries by December 31, of each year the project is implemented. This report shall include the status of the project; best management practices used to avoid or minimize effects to listed species during construction; fish habitat enhancement or preservation measures incorporated; and photographs of the project. The report shall be submitted to:

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